

Eng 9-558

12 JUN 1959

Director of Logistics

Director of Communications

DOC 04	REV DATE 30 APR 1960	BY 018313
ORIG COMP 33	DPI 56	TYPE 02
ORIG CLASS 5	PAGES 7	REV CLASS 8
JUST 22	NEXT REV 240	AUTH: HR 70-2

12 JUN 1959

ELINT Antenna-Filter-Detector System

25X1

1. This Office has an operational requirement for a [redacted] ELINT antenna-filter-detector system to cover the frequency range of 50 to 40,000 mc. The attached proposal and cost analysis from the [redacted] covers the development and fabrication of this system.

25X1

25X1

2. [redacted] has adequate laboratory facilities and experience in the antenna field and is apparently capable of performing this work. [redacted] was selected because they represent the only known source of logarithmically periodic antenna structures operating in these frequency ranges. We have carefully reviewed this proposal and its modifications and it is believed to be fair and reasonable.

25X1

25X1

3. With reference to Attachment B it will be noted that the total contract price is now \$119,380.00 in lieu of the original asking price of \$144,319.00. The original price included expenses to be incurred for the purchase of test equipment as outlined under Government Furnished Equipment of Attachment A. [redacted] has agreed to accept the test equipment on a loan basis for the duration of the task and has therefore reduced their contract price accordingly. Attachment B of Specification No. 59-A-1088-A describes certain modifications to the electrical specifications which are considered necessary to meet operational requirements.

25X1

4. It is requested that contractual action be undertaken to accept this proposal as Task Order 8 of Contract RD-605 in accordance with the attached documents. Attached is Requisition No. MSB 59-611 dated 11 June 1959 indicating that the allotment to be charged for this work is 9-7900-50-600. Funds in the amount of \$119,380.00 have been encumbered for this project. The association of the Agency with the contract and the equipment is classified SECRET. The actual equipment and the engineering reports, however, are UNCLASSIFIED. The cognizant project engineer for the work is [redacted]

25X1

Coordination:

RD

OC-E

Attachments:

OC-E/R+D-EP/JHB:mjr (11 June 1959) Dist: R+D Sub./OC-A/MSB/DP/CC
SPS, [redacted] R+D Obl./R+D [redacted] OC-e/R+D/EP/Proposal
(4) [redacted]
(5) Specification No. 59-A-1088-A
(6) Attachment B to Specification

(1) Attachment A

(2) Attachment B

(3) Requisition No. MSB 59-611

25X1

25X1

25X1

SECRET

11 June 1959

25X1

(IN TRIPLICATE)

25X1

Attention:

Subject: Antenna-Filter-Detector System
covering the range of 50 mcs to 40,000 mcs,
Submission of a revised quotation for

25X1

Reference: (a) Buyer's letter dated 19 May 1959
(b) Seller's letter dated 2 June 1959

Enclosure: (A) Estimated Cost Analysis, in triplicate

Gentlemen:

Pursuant to Reference (a), the bidder submitted a formal cost-plus-fixed-fee quotation, Reference (b), in response to the requirements contained therein. It was noted in Reference (b) that the estimated selling price for Item 1 included an amount for the purchase of certain test equipment as noted therein.

The bidder wishes to advise that if the test equipment as listed in Reference (b) is government furnished, the estimated selling price for Items 1, 2, 3, 4 and 5 can be reduced as follows:

Item 1	Two (2) Antenna-Filter-Detector Systems, 50-40,000 mc including four (4) antennas with crystal detectors, twelve (12) filters, and equipment boards where required for the mounting of ancillary equipment	\$ 111,453.
Item 2	Manufacturing Drawings, two (2) sets, one (1) reproducible	1,157.
Item 3	Operating and Maintenance Manuals, six (6) each	2,570.
Item 4	Monthly Engineering Reports	1,339.
Item 5	Final Engineering Report	2,861.
		<u>\$ 119,380.</u>

The remaining terms and provisions of Reference (b) except as noted herein are applicable to the above quotation.

Very truly yours,


Assistant Director
Contract Administration Division
GWB:NKG:js
SECRET

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U. S. C., SECTIONS 793 AND 794. TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

Page Denied

SECRET

2 June 1959

**AIR MAIL
(IN TRIPLICATE)**

Attention:

Subject: Antenna-Filter-Detector System
 covering the range of 50 mcs to 40,000 mcs,
 Submission of a quotation for

Reference: (a) Buyer's letter dated 19 May 1959

Enclosure: (A) Estimated Cost Analysis, in triplicate
(B) Technical Proposal, in triplicate

Gentlemen:

Pursuant to Reference (a), the bidder submits the following quotation together with its estimated cost analysis, Enclosure (A), and engineering proposal, Enclosure (B), for consideration:

<u>Item</u>	<u>Description</u>	<u>Estimated Selling Price</u>
1.	Two (2) Antenna-Filter-Detector Systems, 50 - 40,000 mc including four (4) Antennas with crystal detectors, twelve (12) filters, and equipment boards where required for the mounting of ancillary equipment.	\$ 136,392.
2.	Manufacturing Drawings, two (2) sets, one (1) reproducible	1,157.
3.	Operating and Maintenance Manuals, six (6) each	2,570.
4.	Monthly Engineering Reports	1,339.
5.	Final Engineering Report	2,861.
<u>Total Estimated Selling Price</u>		<u>\$ 144,319.</u>

SECRET

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U. S. C., SECTIONS 793 AND 794. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

SECRET

-2-

2 June 1959

25X1

The above equipment shall be in accordance with specifications as noted in Reference (a) except as modified by the bidder's engineering proposal, Enclosure (B).

The above quotation is predicated upon the award of a mutually acceptable cost-plus-fixed-fee research and development type of contract.

Delivery of the above items can be made in accordance with the following schedule:

<u>Item</u>	<u>Delivery Date</u>
1.	Twelve (12) months after receipt of fully executed contract
2.	One month after delivery
3.	of Item 1 above
5.	
4.	As required

In the event of award of contract based on this proposal, it is requested that provision be made for payments at intervals of not more than thirty (30) days, based on cost incurred and applicable proportion of the fixed fee. In addition, it is requested that the following provisions be included in any resulting contract:

"Articles customarily produced or assembled by the contractor in the regular course of its business and supplied in connection with this contract, whether or not such articles are catalog items, will be billed by the contractor and paid for hereunder at the contractor's lowest fixed price chargeable to an outside purchaser for similar quantities under comparable terms and provisions providing no duplication of profit results from this method of billing."

"Costs of research programs of a general nature will be acceptable to the extent found reasonable and allocable."

It should be noted that an amount has been included in the estimated selling price for Item 1 for the purchase of certain test equipment to be used in the design and fabrication of the antenna-filter-detector system. The following is a list of the test equipment which will be required:

Polgrad Signal Generators

Basic Unit
10 KMC-15.5 KMC
15 KMC - 21 KMC

GB-3
G 1015
G 1521

Basic Unit
18 KMC - 22 KMC

HO-2
G 1822-1

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U. S. C., SECTIONS 793 AND 794. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

SECRET

SECRET

-3-

2 June 1959

25X1

(Continued from Page 2) Polorad Signal Generators

22 KMC - 25 KMC	G 2225-1
24.7 KMC - 27.5 KMC	G 2427-1
27.27 KMC - 30 KMC	G 2730-1
29.7 KMC - 33.52 KMC	G 3033-1
33.52 KMC - 36.25 KMC	G 3336-1
35.1 KMC - 39.7 KMC	G 3540-1

Favorable consideration of the enclosed quotation is respectfully requested. Representatives of the bidder will be readily available in the event that further contractual or technical discussion is necessary. In matters pertaining to this quotation, please reference the subject proposal and address all inquiries to [redacted] Assistant Director, Contract Administration Division, or [redacted] Contract Administrator, [redacted]

25X1
25X1
25X1

Very truly yours,

[redacted] Assistant Director
Contract Administration Division
GWB:NRG:js

25X1

THIS DOCUMENT CONTAINS INFORMATION AFFECT-
ING THE NATIONAL DEFENSE OF THE UNITED STATES
WITHIN THE MEANING OF THE ESPIONAGE LAWS,
TITLE 18, U. S. C., SECTIONS 793 AND 794. ITS
TRANSMISSION OR THE REVELATION OF ITS CON-
TENTS IN ANY MANNER TO AN UNAUTHORIZED
PERSON IS PROHIBITED BY LAW.

SECRET

Page Denied

SECRET

PROPOSAL FOR THE DEVELOPMENT OF A

UHF ANTENNA SYSTEM (AN-22, AN-23, AN-24, AN-25)

25X1

It is proposed to develop a system of antennas, filters and detectors according to Development Specification No. 59-A-1088-A with the following exceptions.

Paragraph 3.3 Filter Characteristics**Paragraph 3.3.2 Electrical Considerations**

The frequency ranges of the filters in the 50 to 500 mc range will be used as design goals. It is possible that it will be necessary to use four filters instead of three to cover this range.

Paragraph 3.3.2.1

The attenuation figure of 60 db at frequencies $\pm 15\%$ from the pass band will be used as a design goal. The guaranteed attenuation at these frequencies will be 45 db.

Paragraph 3.4 Detector Characteristics

The detector that will be used below 10 kmc will be the Sylvania IN 358A crystal in the Sage 101B holder. The sensitivity of this combination is shown in figure 15b, page 21 of Report No. 893 "Final Report on Broadband Antenna and Filters & Video Detector". The detectors used in the frequency range above 10 kmc will have sensitivities as described on page 22 of this report, i.e., -45 dbm from 10 to 20 kmc and -40 dbm from 20 to 40 kmc.

The techniques and components used to develop this system will be those described in Report No. 893.

SECRET